

WHAT IS CLAIMED IS:

1. An oral appliance for maintaining stability of one or more aspects of a user's masticatory system, comprising:

5 a first arch adapted to receive at least some of a user's teeth, the first arch comprising an anterior substantially planar region located proximate a midline of the first arch; and

10 a second arch adapted to receive at least some of the user's teeth, the second arch comprising an anterior bearing platform located proximate a midline of the second arch, elongated in an anterior-posterior direction, and operable to contact the anterior substantially planar region of the first arch when the user bites down with the oral appliance inserted in the user's mouth and the user's temporomandibular joint in its proper natural position to help maintain stability of one or more aspects of the user's masticatory system.

15 2. The oral appliance of Claim 1, wherein the first arch is an upper arch and the second arch is a lower arch.

20 3. The oral appliance of Claim 2, wherein the anterior bearing platform is constructed such that when oral appliance is inserted in the user's mouth at least a posterior portion of the anterior bearing platform remains in contact with the anterior substantially planar region despite extension of the lower jaw in an anterior direction.

25 4. The oral appliance of Claim 1, wherein the first and second arches comprise custom arches customized to fit the user's dentition.

5. The oral appliance of Claim 1, wherein the anterior substantially planar region and the anterior bearing platform are located in proximity to the user's most anterior teeth.

6. The oral appliance of Claim 1, wherein the anterior bearing platform of the second arch is operable to move substantially freely in contact with the anterior substantially planar region of the first arch when the oral appliance is inserted in the user's mouth.

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7. The oral appliance of Claim 1, wherein:
the first arch further comprises one or more additional substantially planar regions; and

the second arch further comprises left and right bearing points located distal
10 from the anterior bearing platform of the second arch, each bearing point of the second arch operable to contact and move substantially freely within a corresponding additional substantially planar region of the first arch.

8. The oral appliance of Claim 1, wherein the oral appliance is operable
15 to help maintain proper positioning of the user's temporomandibular joint.

9. A method of constructing an oral appliance for maintaining stability of one or more aspects of a user's masticatory system, comprising:

forming a first arch adapted to receive at least some of a user's teeth, the first
20 arch comprising an anterior substantially planar region located proximate a midline of the first arch; and

forming a second arch adapted to receive at least some of the user's teeth, the second arch comprising an anterior bearing platform located proximate a midline of the second arch, elongated in an anterior-posterior direction, and operable to contact
25 the anterior substantially planar region of the first arch when the user bites down with the oral appliance inserted in the user's mouth and the user's temporomandibular joint in its proper natural position to help maintain stability of one or more aspects of the user's masticatory system;

the constructed oral appliance comprising the first and second arches.

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10. The method of Claim 9, wherein the first arch is an upper arch and the second arch is a lower arch.

11. The method of Claim 10, wherein the anterior bearing platform is formed such that when oral appliance is inserted in the user's mouth at least a posterior portion of the anterior bearing platform remains in contact with the anterior substantially planar region despite extension of the lower jaw in an anterior direction.
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12. The method of Claim 9, wherein the first and second arches comprise custom arches customized to fit the user's dentition.

10 13. The method of Claim 9, wherein the anterior substantially planar region and the anterior bearing platform are located in proximity to the user's most anterior teeth.

14. The method of Claim 9, wherein the anterior bearing platform of the second arch is operable to move substantially freely in contact with the anterior substantially planar region of the first arch when the oral appliance is inserted in the user's mouth.
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15. The method of Claim 9, wherein:
20 the first arch further comprises one or more additional substantially planar regions; and

the second arch further comprises left and right bearing points located distal from the anterior bearing platform of the second arch, each bearing point of the second arch operable to contact and move substantially freely within a corresponding additional substantially planar region of the first arch.
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16. The method of Claim 9, wherein the oral appliance is operable to help maintain proper positioning of the user's temporomandibular joint.

17. A method of monitoring positioning of a user's temporomandibular joint, comprising:

providing an oral appliance comprising a first arch and a second arch each adapted to receive at least some of the user's teeth, the first arch operable to contact
5 the second arch at only an anterior bearing platform of the second arch when the user bites down with the oral appliance inserted in the user's mouth and the user's temporomandibular joint in its proper natural position to help maintain stability of one or more aspects of the user's masticatory system, the anterior bearing platform being located proximate a midline of the second arch and being elongated in an anterior-
10 posterior direction;

inserting the oral appliance into the user's mouth;

introducing an impression material between the first and second arches;

creating a first impression record using the impression material, indicating that the first arch is operable to contact the second arch at only the anterior bearing
15 platform when the user bites down with the oral appliance inserted in the user's mouth and the user's temporomandibular joint in its proper natural position;

again inserting the oral appliance into the user's mouth;

again introducing an impression material between the first and second arches;

creating a second impression record using the impression material, indicating
20 whether the first arch is operable to contact the second arch at only the anterior bearing platform when the user bites down with the oral appliance inserted in the user's mouth and the user's temporomandibular joint in its proper natural position;

comparing the second impression record to the first impression record; and

if the second impression record matches the first impression record, then
25 determining that one or more aspects of the user's masticatory system have remained stable over a period of time between creation of the first and second impression records.

18. The method of Claim 17, wherein the first arch is an upper arch and
30 the second arch is a lower arch.

19. The method of Claim 17, wherein the first and second arches comprise custom arches customized to fit the user's dentition.

20. The method of Claim 18, wherein:

5 the first arch comprises an anterior substantially planar region located proximate a midline of the first arch; and

the second arch comprises the anterior bearing platform, the anterior bearing platform of the second arch being operable to contact and move substantially freely within the anterior substantially planar region of the first arch when the oral appliance
10 is inserted in the user's mouth such that at least a posterior portion of the anterior bearing platform remains in contact with the anterior substantially planar region despite extension of the lower jaw in an anterior direction.

21. The method of Claim 17, wherein the impression material comprises a
15 BLU-MOUSSE material.

22. The method of Claim 17, further comprising, if the second impression record does not match the first impression record:

determining that one or more aspects of the user's masticatory system have not
20 remained stable over the period of time between creation of the first and second impression records; and

modifying the anterior bearing platform such that the first arch is operable to contact the second arch at only the anterior bearing platform when the user bites down with the oral appliance inserted in the user's mouth and the user's temporomandibular
25 joint in its proper natural position.

23. The method of Claim 17, wherein the period of time is between zero and sixty minutes and the monitoring is performed in connection with initial fitting of the oral appliance for the user.

24. The method of Claim 17, wherein the period of time is between one week and fifty-two weeks and the monitoring is performed to determine long term stability of the user's masticatory system.

5 25. The method of Claim 17, wherein the oral appliance is operable to help maintain proper positioning of the user's temporomandibular joint.

26. The method of Claim 17, further comprising:
monitoring the suitability for the user of the oral appliance comprising the
10 anterior bearing platform; and
if the user experiences discomfort or if health and stability of the user's temporomandibular joint are expected to be compromised, providing additional right posterior and left posterior bearing points located distally from the anterior bearing platform such that the first arch is operable to contact the second arch at only the
15 anterior bearing platform, right posterior bearing point, and left posterior bearing point when the user bites down with the oral appliance inserted in the user's mouth and the user's temporomandibular joint in its proper natural position.